

Verdc. in Kew Bull. 23: 509. 1969. *P. psyllium* Linn. Sp. Pl. ed. 2. 167. 1762. non Linn. Sp. Pl. 115. 1753; Hook. f. Fl. Brit. Ind. 4: 707. 1885; Bamber, Pl. Punj. 426. 1916.

Erect, branched herbs up to 14 cm tall. Young branches glandular-pubescent. Leaves cauline, linear, upto 4 cm long, opposite or sub-opposite. Flowers in spikes on axillary peduncles. Spikes up to 1.2 cm long, ovoid, bracts upto 0.7 cm long, with glandular and simple hairs. Calyx lobes with scarious, glandular and simple hairy margins. Corolla tube rugulose, lobes ovate, acute. Stamens 4. Style hairy, stigmas 2. Fruit circumscissile a little below the middle. Seeds boat shaped.

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June 18, 1980.

Illus: *P. psyllium* Linn. l.c.: Chohan and Shah, J. Bombay nat. Hist. Soc. 62: 327. fig. 1-4. 1965; *P. afra* Linn. l.c.: Verdc. in Milne Redhead and Polhill, Fl. Trop. E. Africa, Plantaginaceae 6. fig. 1/10. 1971; Kazmi in Nasir and Ali, Fl. W. Pak. no. 62: 19, fig. 3A-B. 1974.

Fl. & Frt.: July. *Loc.:* Poonagiri, 9-7-1925 (without collector's name and number).

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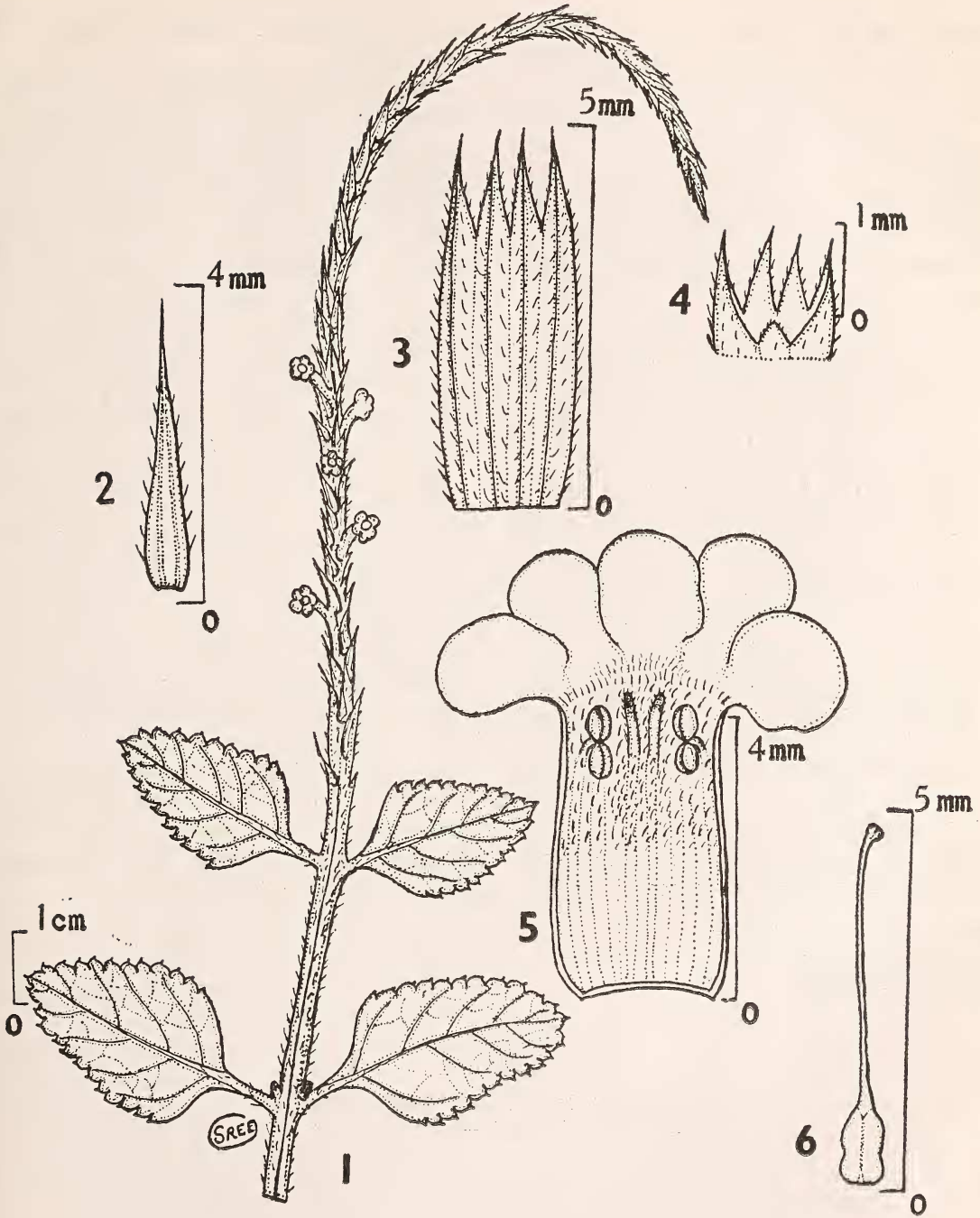
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34. *STACHYTARPHETA CAYENNENSIS* (L. C. RICH.) SCHAU. — A NEW RECORD FOR INDIA AND WITH A KEY TO THE INDIAN SPECIES

(With six text-figures)

According to literature available at hand the American genus *Stachytarpheta* Vahl (Verbenaceae) is commonly represented in India, by the naturalised species *Stachytarpheta indica* (Linn.) Vahl and *S. jamaicensis* Vahl as weeds of waste places in almost all parts of the country. Another species, *Stachytarpheta mutabilis* (Jacq.) Vahl, has recently been introduced into

some of the Indian Gardens in the hills and is sometimes found as an escape. A fourth species is now rapidly spreading as a weed in the southern part of the Peninsular India, particularly as undergrowth among plantations and along the banks of canals, streams and rivers creating some concern among people about future consequences. When and how this plant



Figs. 1-6. *Stachytarpheta cayennensis* (L. C. Rich.) Schau.

1. A branch; 2. Bract; 3. Calyx tube showing the four prominent teeth; 4. Part of calyx tube showing the fifth tooth; 5. Corolla split opened; 6. Gynoecium.

entered into this country is not known. It closely resembles *Stachytarpheta indica* (Linn.) Vahl and is usually mistaken to be the same species. On closer scrutiny this new entrant turned out to be *S. cayennensis* (L. C. Rich.) Schau., a native of Tropical America, now running wild in Africa (Brenan 1950). *Stachytarpheta cayennensis* (L. C. Rich.) Schau. can be distinguished from other Indian species using the following key:—

1. Calyx 10-14 mm long; spike 40-100 cm long; c. 5 mm across; bracts 10-12 mm long; limb of corolla 15 mm across.....*S. mutabilis*
1. Calyx 4-6 mm long; spike 15-40 cm long, c. 2.5 mm across; bracts 4-5 mm long; limb of corolla 7-12 mm across.....2
2. Calyx teeth 5, 4 teeth more or less equal in length, fifth one very short; bracts 0.5-1 mm wide, prominently ciliate on margins.....*S. cayennensis*
2. Calyx teeth 4, all equal in length or nearly so; bracts 1.25-2.5 mm wide, obscurely ciliate on margins3
3. Leaves ovate or ovate-elliptic, coarsely crenate-serrate, pale green; secondary lateral nerves prominent beneath.....*S. jamaicensis*
3. Leaves oblong or subovate, finely serrate, bright green; secondary lateral nerves not prominent beneath*S. indica*

A description of the species, and figures are provided for easy determination of the taxon. The specimens cited are deposited in the Her-

barium of Botanical Survey of India, Coimbatore (MH).

Stachytarpheta cayennensis (L. C. Rich.) Schau. in DC. Prodr. 11: 562. 1847; Danser in Ann. Jard. Bot. Buitenz. 40: 2. 1929, Brenan in Kew Bull. 5: 223. 1950.

Undershrub, c. 1 m high; branches slender, pubescent. Leaves 1.5 x 0.5-3 cm, opposite, ovate to oval-elliptic, more or less densely hairy on nerves; crenate-serrate with 10-18 serratures on either side, obtuse at apex, oblique at base. Flowers in axillary and terminal, pubescent spikes 15-23 cm long and c. 3 mm across; bracts, c 4 mm long, linear-lanceolate, ciliate on margins. Calyx tube 4-5 mm long, 1.5-2 mm across, narrowly cylindrical, pubescent; teeth 5, 4 posterior on the anticous (outer) side, unequal; fifth tooth very small. Corolla white; tube 4-5 mm long, hirsute on throat; lobes 5, each c. 1.5 mm long. Perfect stamens 2, epipetalous, included; filaments very short, pubescent; staminodes 2, hairy. Ovary 2-loculed, ovules solitary; style filiform; stigma capitate or slightly bilobed. Fruit 3-3.5 mm long, c. 1 mm across, glabrous.

Distribution: Tropical America, Africa.

Specimens examined: KERALA. Quilon Dt.: Placherry, Ranni R.F., 16-12-1979, C. N. Mohanan 63767; Alleppey Dt.: Nedumudy, 3-3-1980, P. V. Sreekumar 67040.

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September 8, 1980.

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